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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/482,054	01/13/2000	Kenneth Margon	031613.0012	6497

26118 7590 09/20/2002

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EXAMINER

NGUYEN, STEVEN H D

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 09/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/482,054

Applicant(s)

MARGON, KENNETH

Examiner

Steven HD Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61,64-71,74-77,80 and 81 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1-61,64-71,74-77,80 and 81 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed on 7/18/2002. Claims 62-63, 72-73 and 78-79 have been canceled and claims 1-61, 64-71, 74-77 and 80-81 are pending in the application.
2. The part of amendment, which is filed on 4/26/2001, is not enter because the applicant must replace the whole paragraph.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1-3, 5-7, 19, 24-25, 32-35, 40, 46, 50, 55-57, 61, 66, 68-71, 74, 76-77 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashi by (USP 5682604) in view Sardana (USP 5012469).

As claims 1-3, 5-7, 19, 24-25, 32-35, 40, 46, 50, 55-57, 61, 66, 68-71, 74, 76-77 and 80, Kashi discloses a base station having a transceiver (Fig 2, Ref 10) for providing a forward channel (Fig 7, Ref 200), a remote station (Fig 2, Ref 11) for monitoring “listening or sensing” the forward channel signal and monitoring reserve channel within a clear “free” channel access interval that assigned to the remote units and in sequential order with at least one other remote (Fig 7, time to sense channel free and col. 1, lines 30-39 and col. 6, lines 7-13) and providing reserve channel signal if it’s clear “free” (Fig 7, Ref 210). See Abstract, col. 1, lines 6 to col. 4, lines 63 and Fig 1-7; a base station (fig 2, ref 10) and a remote station (Fig 2, Ref 11) inherent receive and transmit an encoded signal between them as a data packet (See Fig 4 and col. 4, lines 22-37 as claim 2-3, 40 and 61); a priority and unique address of remote station for receiving the forward information from the central station (See col. 4, line 22-37 as claimed 5-7, 33-35, 56-57, 70-71 and 77); a forward and reserve channel signal is provided during its predetermined interval (See Fig 6 as claimed 19, 46, 73 and 79) and a wireless communication system having frequency (Fig 2 as claimed 24-25, 50, 66, 74 and 80). However, Kashi fails to disclose a method and system for dividing a clear access interval into a plurality of time slot wherein each time slot is assigned to each mobile unit. In the same field of endeavor, Sardana discloses a system which including a upstream and downstream channel wherein the downstream channel has a plurality of reservation mini-slot for transmitting to signal to the base station wherein each mobile is

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assigned a mini-slot and the number of mini-slots are equal to the number of mobile stations (See col. 3, lines 1 to col. 6, lines 66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for dividing a reservation channel into a plurality of mini-slots wherein each mini-slot assigned to each mobile unit and the number of mini-slots are equal to the number of mobile units as disclosed by Sardana's system and method into Kashi's system and method. The motivation would have been to reduce the collision and improve the throughput of the system.

6. Claims 4, 8-18, 23, 26-31, 36-39, 41-45, 49-54, 58-60, 65, 67, 75 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashi and Sardana as applied to claims 1, 32, 55, 68-69 and 76 above, and further in view of Heide (USP 5677909).

As claims 4 and 41, Kashi and Sardana do not fully disclose the data packet including a digitized voice and data. Official Notice is taken that both the concept and the advantages of providing the data packet including digitized voice and data are well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the data packets including the digitized voice and data for transmitting between the base and remote station. The motivation would have been to integrate a wireless network with a wireline network such as Internet and turn the Internet into a reliable telecommunication network.

As claims 8-11, 36-37 and 60, Kashi and Sardana do not fully disclose an address is broadcast, a semi broadcast, IP. Official Notice is taken that both the concept and the advantages of providing the address for a device is well known and expected in the art. Therefore, it would

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have been obvious to one of ordinary skill in the art at the time of the invention was made to assign an address to a remote unit.

As claims 12-14, 38-39 and 58-59, Kashi and Sardana do not fully disclose a method of assigning a first remote station address from a first set of addresses in a first zone "cell or sector" and a second remote station address from a second set of addresses in a second zone "cell or sector"; wherein set of addresses form an Internet subnetwork. Official Notice is taken that both the concept and the advantages of assigning a different address to each remote to different zone having an Internet subnetwork are well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to assign a different address to each remote to different zone having an Internet subnetwork. The motivation would have been to easily locate the remote station in the zones.

As claims 15-18 and 42-45, Kashi and Sardana discloses each remote station having a priority parameter for accessing a clear channel interval at the predetermined time in a round robin fashion and an equal predetermined time for a clear channel assessment interval (See Abstract). However, Kashi does not disclose a clear channel interval including a predetermined time slot and each mobile monitor clear channel during its assigned time slot. In the same field of endeavor, Heide discloses a wireless system includes a base station and remote stations including a forward channel "Fig 6, downward period, broadcast period", a reservation channel "upward period" and clear assessment channel "request period".

Since, Kashi discloses a plurality of time slots for remote station responding to global request. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a superframe which includes a downward period, upward period

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and request period for accessing upward period for transmitting a data packet as disclosed Heidi into Kashi's and Sardana's wireless communication system. Even without, Heidi's teaching, one of ordinary skill in the art would know how to divide a frame into forward, a reserve channel and clear assessment channel interval into a time slot for assigning to the remote station. This method is well known in the art.

As claims 30-31 and 53-54, Kashi and Sardana do not fully disclose a method of transmitting a control packet for synchronizing the base station and remote station. Official Notice is taken that both the concept and the advantages of assigning a different address to each remote to different zone having an Internet subnetwork are well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to synchronize the base station and remote station. The motivation would have been to adjust a clock of the remote station to coincide with the base station.

As claims 26-29, 51-52, 67, 75 and 81, Kashi and Sardana do not fully disclose a wireless communication system including a half, full duplex and the signals are transmitted via electrical or optical medium. Official Notice is taken that both the concept and the advantages of forward and reserve channel being half or full duplex is well known and expected in the art.

As claims 23, 49 and 65, Kashi does not disclose a system being used in IPMA environment. Official Notice is taken that both the concept and the advantages of using Internet protocol in a wireless system is well known and expected in the art.

7. Claims 20-22, 47-48 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashi and Sardana as applied to claims 1, 32 and 55 above, and further in view of Kay (USP 5299198).

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As claims 20-22, 47-48 and 64, Kashi and Sardana do not fully disclose a guard time among the forward, reserve and clear assessment channel interval. However, in the same field of endeavor, Kay discloses a guard time for the channels (See Fig 9 and 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a guard time in the position such as beginning or ending of forward, reserve and clear assessment interval as disclosed by Kay into Kashi's and Sardana's wireless communication. Since, a method of inserting a guard time in the positions such as a beginning or ending interval is well known in the art. So, without Kay's teaching one of ordinary skill in the art would be known how to insert a guard time to prevent interference between the intervals.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (703) 308-8848. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (703) 308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

A handwritten signature in black ink, appearing to read 'Steven HD Nguyen', with a long, sweeping horizontal line extending to the right.

Steven HD Nguyen
Primary Examiner
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September 16, 2002